

E7.4-10379

CR-137164

DYNAMICS OF DISTRIBUTION AND DENSITY OF PHREATOPHYTES
AND OTHER ARID-LAND PLANT COMMUNITIES

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Type I Progress Report for Period 1 July - 31 Aug 1973

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ARID-LAND PLANT COMMUNITIES Progress

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Report, 1 Jul. - 31 (Geological Survey,
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Type I Progress Report
ERTS-1

a. Title: Dynamics of Distribution and Density of Phreatophytes and other Arid-Lands Plant Communities

ERTS-1 Proposal No.: SR ³⁴²~~243~~-8

b. GSFC ID No. of P. I.: IN 411

c. Statement and explanation of any problems that are impeding the progress of the investigation: NONE

d. Discussion of the accomplishments during the reporting period and those planned for the next reporting period: Measurements of plant coverage at five sites have continued. Plant coverage data have been acquired at the time of each satellite overpass to date. The number of cloud-free overpasses of the Tucson Test Site through August 31, 1973 is eight.

The PI visited Stanford Research Institute during the week of July 15 during which time work continued on procedures for mapping areas of dense plant coverage. A very promising procedure utilizing the Electron Satellite Image Analysis Console (ESIAC) has been developed by SRI scientists. The technique involves a ratioing procedure whereby scene radiance values from a MSS-6 image are divided by radiance values from the corresponding MSS-5 image. Areas with dense plants are enhanced by this procedure.

Photographs of the Tucson Test Site were taken on August 27, 1973 from a light airplane.

e. Discussion of significant scientific results and their relationship to practical applications or operational problems including estimates of the cost benefits of any significant results (To be prepared in scientific abstract form of 200 words or less): NONE

f. A listing of published articles, and/or papers, pre-prints, in-house reports, abstracts of talks, that were released during the reporting period: NONE

g. Recommendation concerning practical changes in operations, additional investigative effort, correlation of effort and/or results as related to a maximum utilization of the ERTS system: NONE

h. A listing by date of any changes in Standing Order Forms: None during report period.

i. ERTS Image Descriptor forms: None

j. Listing by date of any changed Data Request forms submitted: NONE

k. N/A